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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,486	04/12/2004	Gerry G. Hull	15555-0036	4939

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EXAMINER

KOCA, HUSEYIN

ART UNIT	PAPER NUMBER
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3744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/823,486

Applicant(s)

HULL, GERRY G.

Examiner

Huseyin Koca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/12/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because:

- Reference character "10" has been used to designate both "the graphical thermostat and sensor" (page 5, line 3) and "the sensor" (page 5, line 5).
- Reference character "30" has been used to designate both "the bus" (page 7, line 4) and "historical data" (page 8, line 19).

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4)

because:

- Reference characters "10" (page 5, line 3) and "15" (page 7, line 19) have both been used to designate "the graphical thermostat and sensor".
- Reference characters "95" (page 7, line 21) and "30" (page 8, line 19) have both been used to designate "historical data".

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they do not include the following reference sign(s) mentioned in the description:

- Reference character "25" in page 7, line 20.
- Reference character "85" in page 9, line 13.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 recites the limitation "a device" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 10 and 17 recite the limitation "the device" in the second line of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order for a method to be statutory it must show a practical application of an otherwise abstract idea. In order to meet this requirement it must (a) show a practical application through a physical transformation or (b) other produce a useful, concrete and tangible result. A physical transformation can be shown if the method transforms an article or physical object into a different state or thing. In the presently claimed invention each of the method steps is intended to be performed in a computer. There is no physical object which can be or is transformed. Further, the presently claimed invention fails to produce a concrete result. The scope of the claim 13 is a computer program. A computer program is merely a set of instructions capable of being executed by a computer. Computer program cannot produce a concrete result by itself. Claims 14-17 are dependent claims and therefore are rejected for the same reason.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1- 3, 11-13, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Shah (6,595,430).

In regard to claims 1 and 18, Shah provides a display where the display is operable to illustrate a range of temperature on the first axis, and a range of times on the second axis (C-4, L-7-10). Referring to Fig. 1, there is also a shaded area defining the temperature differential centered about temperature set by the user.

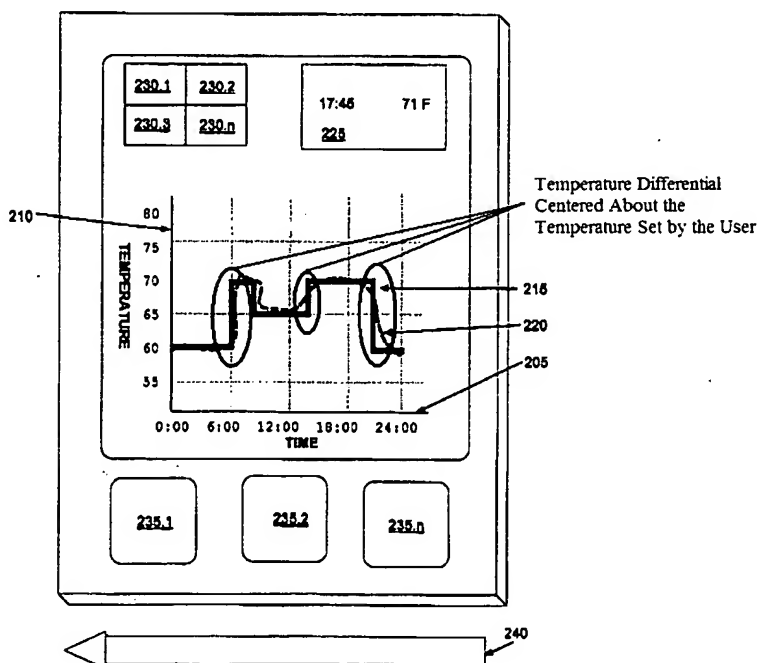


Fig. 1 – Fig. 2 from Shah (6,595,430)

In regard to claim 2, Shah teaches a step of providing a line indicating the past temperature of at least one area. Referring to Fig. 1, Shah provides a bold line (shaded area) indicating the temperature as 60 degrees between 0:00 and 6:00.

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In regard to claim 3, Shah teaches a step of showing a user-selectable future date on the display (C-4, L-20-24).

In regard to claim 11, Shah teaches the step of receiving a range of temperatures selected by the user, and the range of temperatures are highlighted by the user and displayed on the display (C-3, L-38-42; C-4, L-41-44).

In regard to claim 12, Shah teaches the step of receiving range of dates selected by a user, and the range of dates are highlighted by the user and displayed on the display (C-3, L-49-56; C-4, L-41-44).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (6,595,430) and further in view of Deutscher et al. (US2004/0001106 A1).

In regard to claim 4, Shah meets the limitations of the claim but Shah does not teach the step of showing the present time by using a time line, and the time line intersects the range of times provided on the second axis. Deutscher et al. use a timeline for the same reason as the applicant, which is to show the current time in graphical representation. Deutscher et al. teach the step of showing the present time by using a time line, and time line intersects the range of times provided on the second axis (0178, line 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a time line to show the present time by intersecting the range of times provided on the second (time) axis as taught by Deutscher et. al in Shah's thermostat to see the current time. This will help the user to easily have an idea of the current time in a graphical thermostat when the time is only displayed as part of the graph.

In regard to claim 5, Shah provides at least one function button on the display, wherein the function button is selectable by the user (C-4, L-57-59).

10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (6,595,430) and Deutscher et al. (US2004/0001106 A1), and further in view of Cottrell (6,502,758 B2).

In regard to claim 6, Shah and Deutscher et al. meet the limitations of the claims except that Shah employ buttons rather than a rotating knob in order to input data. However, because these two elements were art-recognized equivalents at the time the invention in the control applications where it is used as inputting data, one of ordinary skill in the art would have found it obvious to substitute buttons with rotating control

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knob. Shah teaches using buttons to receive user input instead of a rotating control knob (C-4, L-57-59). Cottrell states that the knob can be replaced by buttons (C-4, L-63-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a control knob as taught by Cottrell in Shah's thermostat.

In regard to claim 7, Cottrell teaches that the rotating control knob increases or decreases the current temperature (C-6, L-34-36).

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (6,595,430). In regard to claim 8, Shah teaches displaying the current temperature (C-4, L-11-14). Shah does not explicitly teach using a temperature sensor to measure the temperature. In order for Shah to display the current temperature, Shah needs to measure the temperature. Therefore, one having ordinary skill in the art at the time the invention was made would have known to use some type of temperature sensor, in order to advantageously provide a visual indicator of the temperature such that a user could adjust it accordingly.

12. Claims 8-10, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (6,595,430) and further in view of Ratz et al. (5,203,497).

In regard to claim 8, Shah does not explicitly teach measuring the temperature using temperature sensor. Ratz et al. clearly teach using a temperature sensor 14 to measure the temperature (C-2, L-27-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use temperature sensor to measure the temperature in a thermostat, in order to advantageously learn the current temperature and make the necessary adjustments to the thermostat.

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In regard to claim 9, Ratz et al. teach reporting the temperature local to the at least one display to a device located remote from the at least one display (C-2, L-30-32, 57-59). Referring to Fig. 1, one can see that once the temperature is measured it sends signal to microprocessor 1, and microprocessor 1 provides a temperature signal to display (215) and the microprocessor 2. Microprocessor 2 is connected to a HVAC system. Ratz et al. thermostat is on a local area network, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to display the temperature at a remote location.

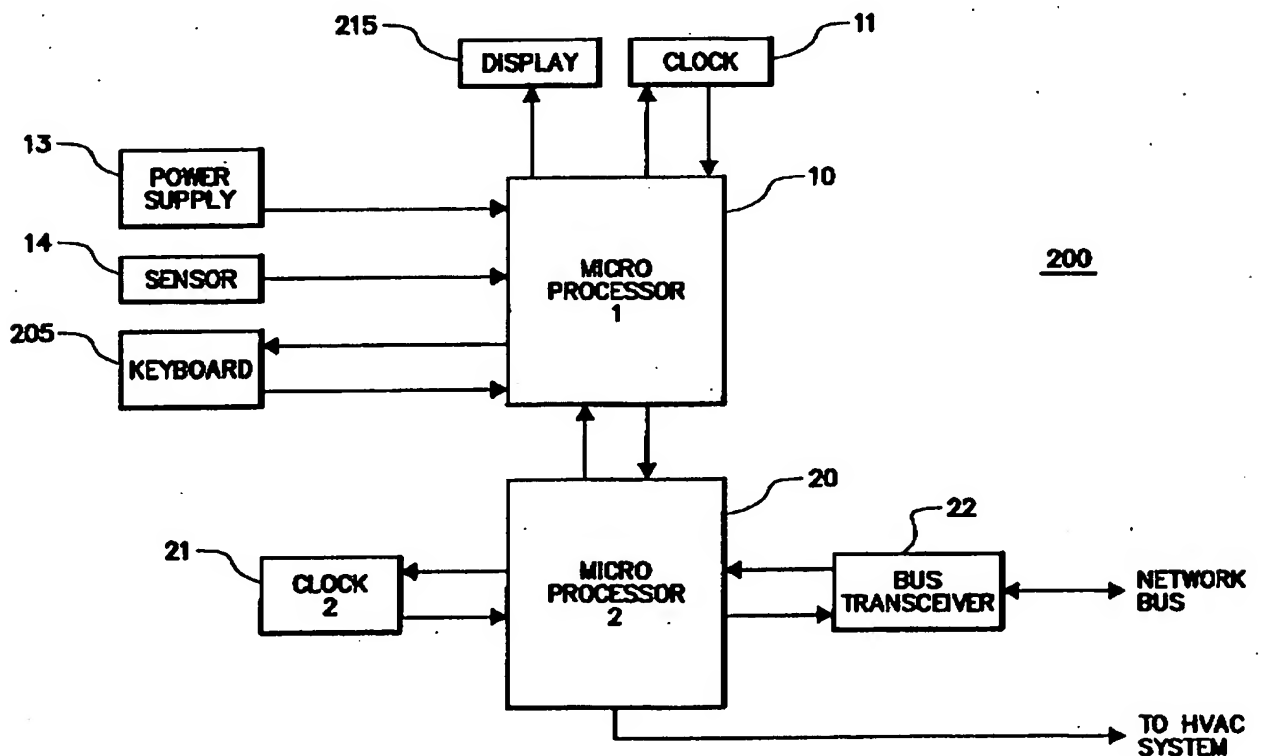


Fig. 2 – Fig. 1 from Ratz et al. (5,203,497)

In regard to claim 10, Ratz et al. teach the step of communicating with the device via a network interface (C-2, L-57-59).

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In regard to claim 19, Ratz et al. teach a communication jack (20) that permits communication with an HVAC system in communication with the thermostat (C-2, L-47-51).

In regard to claim 20, see claims 8 and 10.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huseyin Koca whose telephone number is (571) 272-3048. The examiner can normally be reached on Monday - Friday 9:00AM to 5:30PM.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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